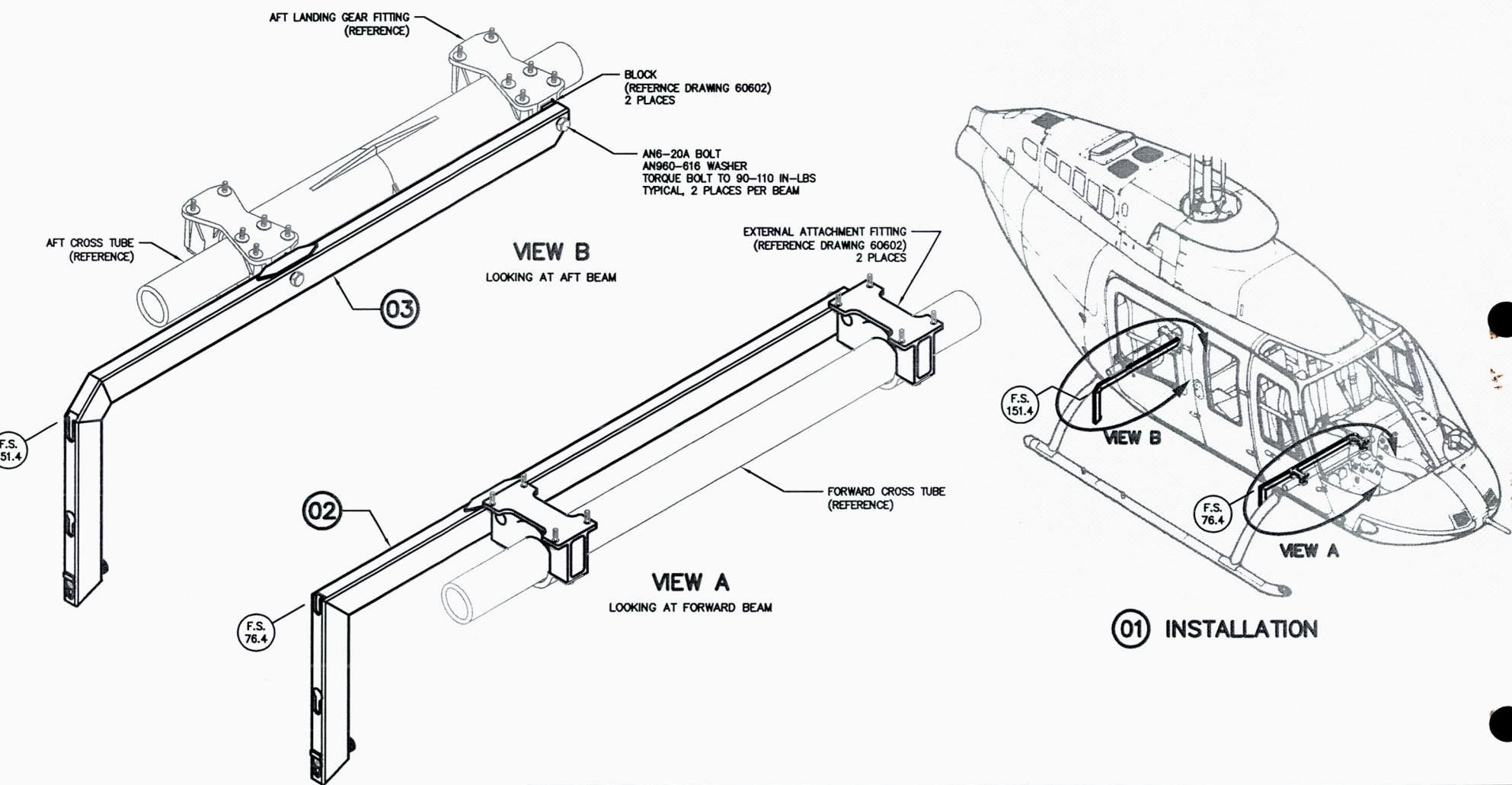


DOCUMENT CONTROL LIST

DOCUMENT NO.	DOCUMENT CONTENT	REVISION
INSTALLATION DOCUMENTS		
70101	Quick Release Cargo Basket Installation	4 ✓
70102	Quick Release Mounting Provisions Installation	0 ✓
ICA698.90	Instructions for Continued Airworthiness	2 ✓
FMS701.90	Flight Manual Supplement	3 ✓
SI698.91	Service Instructions – Sliding Door Modification	0 ✓
FABRICATION DOCUMENTS		
DCL698-1	Document Control List for Quick Release Cargo Basket	2 ✓
DCL698-2	Document Control List for Beams	4 ✓
APPRAVIAL:	ORIGINAL DATE: 10 May, 2006 REVISION DATE: 27 October, 2011	AERO DESIGN LTD. 2013 – 39 th Ave NE, Calgary, Alberta, T2E 6R7 Ph. (403) 250-8027 Fax. (403) 250-8333
	SHEET 1 OF 1	Bell 407 Quick Release Cargo Basket Installation
		Rev.
	DCL701	4

FORM AE-100

DEPARTMENT OF TRANSPORT STATEMENT OF COMPLIANCE OF AIRCRAFT OR AIRCRAFT COMPONENTS WITH THE AIRWORTHINESS REQUIREMENTS		AE-100 No.: AE701 Initial Issue Date: 25 May, 2006 Revision: 3 Revision Date: 25 March, 2009 Approval No.: SH00-48 Delegation No.: 290M Delegate Name: E. Burgoine Classification of Designee: Employer: AERO Design Ltd.			
Aircraft Mfgr: Bell Aircraft Model: 407 Registration: All Eligible				Model Type Airplane <input type="checkbox"/> Helicopter <input checked="" type="checkbox"/> Appliance <input type="checkbox"/> Component <input type="checkbox"/>	
LIST OF APPROVED REPORTS AND DATA					
Document Number	Document Title			Compliance Status	
DCL701 70101 70102	Revision 3 Revision 3 Revision 0	Document Control List and all documents referred to therein Quick Release Cargo Basket Installation Quick Release Mounting Provisions Installation			
		DATA APPROVED BY TRANSPORT CANADA			
FMS701.90	Revision 2	Flight Manual Supplement			
CERTIFICATION					
UNDER THE AUTHORITY VESTED IN ME BY THE DEPARTMENT OF TRANSPORT, I HEREBY CERTIFY THAT THE DATA LISTED ABOVE AND ON THE ATTACHED SHEETS NUMBERED <u>Nil</u> HAVE BEEN EXAMINED IN ACCORDANCE WITH ESTABLISHED PROCEDURES AND FOUND TO COMPLY, TO THE BEST OF MY KNOWLEDGE AND BELIEF WITH THE PERTINENT COMPLIANCE REQUIREMENTS.					
I THEREFORE <input type="checkbox"/> RECOMMEND FOR APPROVAL OF THESE DATA <input checked="" type="checkbox"/> APPROVE THESE DATA					
 E. Burgoine, DAR 290M					



4	AN960-616	4	WASHER
4	AN6-20A	4	BOLT
1	73031-02	03	AFT BEAM (ALTERNATE)
1	69831-02	03	AFT BEAM (ALTERNATE)
1	69831-01	03	AFT BEAM
1	73030-02	02	FORWARD BEAM (ALTERNATE)
1	69830-02	02	FORWARD BEAM (ALTERNATE)
1	69830-01	02	FORWARD BEAM
	70102-01	01	INSTALLATION
01	PART NO.	ITEM	DESCRIPTION
TY.			LIST OF MATERIALS

APPROVALS	DATE	AERO DESIGN LTD.		
DRAWN: JEFF CLARKE	15 JULY 2008			
CHECKED: E. BURGOIN				
UNLESS OTHERWISE SPECIFIED		CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 290M		
DIMENSIONS ARE IN INCHES.		2013 - 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7		
TOLERANCES ON:		tel: (403) 250-8027 fax: (403) 250-8333 aerodesign@telusplanet.net		
DECIMALS	ANGLES			
X.XXX	±0.010	NOT TO SCALE	DWG. SIZE	DWG. NO.
X.XX	±0.03			REV.
X.X	±0.1	SHEET 1 OF 2	A4	70102
				0

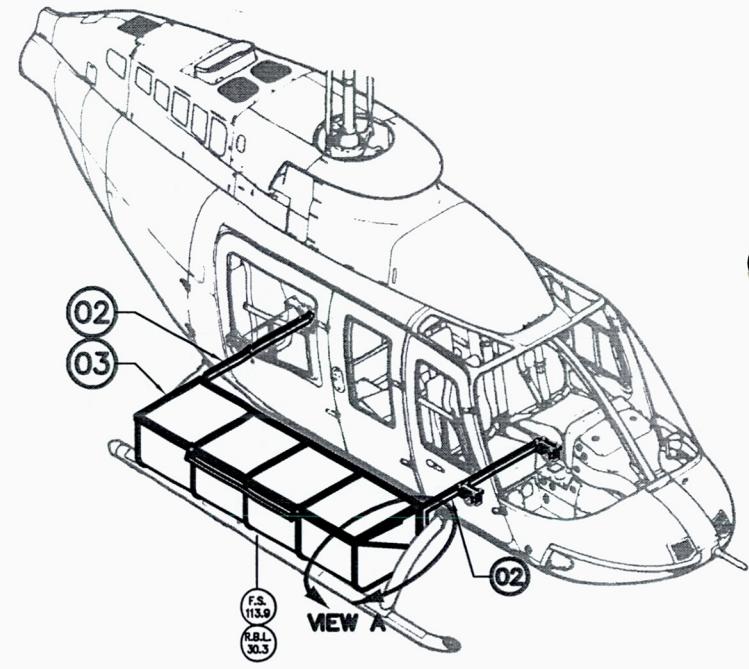
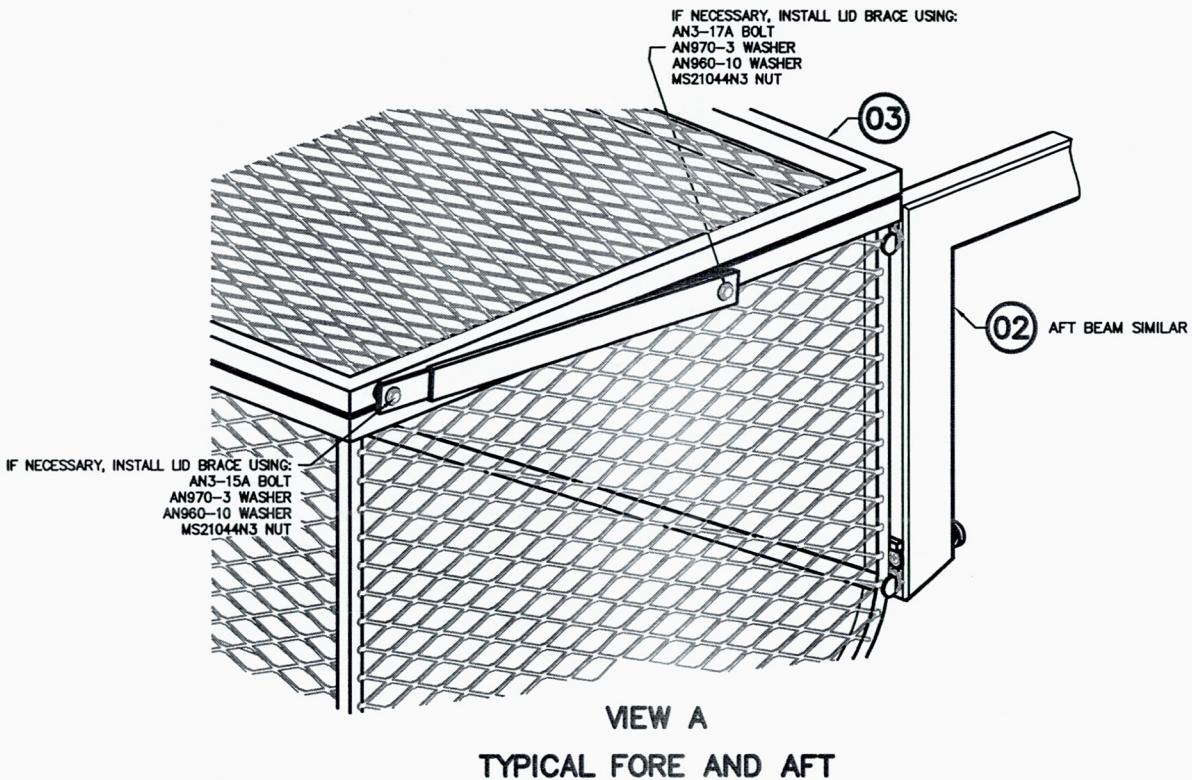
REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE	BJC	JULY 15/08

NOTES:

1. EXTERNAL ATTACHMENT PROVISIONS INSTALLED IN ACCORDANCE WITH DRAWING 60602 IS MANDATORY PREREQUISITE FOR THIS INSTALLATION.
2. HIGH SKID GEAR INSTALLATION IS MANDATORY PREREQUISITE FOR THIS INSTALLATION.
3. BEAMS (73030-01 AND 73031-01) ARE USED FOR INSTALLATION OF EQUIPMENT ON BOTH LEFT AND RIGHT SIDES. PROVISIONS FOR INSTALLING THE QUICK RELEASE CARGO BASKET (69810-01) ON THE RIGHT SIDE IS PROVIDED.

WEIGHT AND BALANCE

ITEM	DESCRIPTION	WEIGHT (LB)	LONGITUDINAL		LATERAL	
			ARM (IN)	MOMENT (LB-IN)	ARM (IN)	MOMENT (LB-IN)
02	FORWARD BEAM	10.1	76.4	771.6	10.9	110.1
03	AFT BEAM	9.8	151.4	1483.7	12.6	123.5
01	MOUNTING PROVISIONS INSTALLATION	19.9	113.3	2255.3	11.7	233.6



1	69810-01	03	CARGO BASKET ASSEMBLY
1	70102-01	02	PROVISIONS INSTALLATION
	70101-01	01	INSTALLATION

PART NO.	ITEM	DESCRIPTION	APPROVALS	DATE
			DRAWN:	17 APR 2006
			CHECKED:	E. BURGOIN

QTY.	LIST OF MATERIALS	UNLESS OTHERWISE SPECIFIED	
		DIMENSIONS ARE IN INCHES.	TOLERANCES ON:
	— NOTICE —	DECIMALS	ANGLES
	THIS DRAWING CONTAINS INFORMATION AND DATA WHICH IS PROPRIETARY TO AERO DESIGN LTD. THIS DRAWING, OR ANY PORTION THEREOF, MAY NOT BE REPRODUCED, COPIED, OR DUPLICATED IN ANY MANNER, NOR USED FOR MANUFACTURING WITHOUT THE WRITTEN CONSENT OF AERO DESIGN LTD. BY ACCEPTING THIS DRAWING FOR REFERENCE, THE RECIPIENT AGREES TO HOLD AERO DESIGN LTD. HARMLESS FROM THE USE, OR MISUSE, OF THIS DRAWING OR THE INFORMATION CONTAINED THEREON.	X.XXX \pm 0.010	\pm 1/2°
		X.XX \pm 0.03	
		X.X \pm 0.1	

AERO DESIGN LTD.
CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 290M
2013 – 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7
tel: (403) 250-8027 fax: (403) 250-8333 aerodesign@telusplanet.net

BELL 407
QUICK RELEASE CARGO BASKET
INSTALLATION

NOT TO SCALE	DWG. SIZE	DWG. NO.	REV.
SHEET 1 OF 2	A4	70101	3

REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE	BJC	APR 17/06
1	UPPER BEAM ATTACHMENT CHANGED	BJC	NOV 09/06
2	ADD ELIGIBLE BEAM ASSEMBLIES	BJC	JUNE 29/07
3	DRAWING RESIZED, PROVISIONS MOVED TO DRAWING 70102	BJC	JULY 15/08

NOTES:

1. EXTERNAL ATTACHMENT PROVISIONS INSTALLED IN ACCORDANCE WITH DRAWING 60602 IS MANDATORY PREREQUISITE FOR THIS INSTALLATION. QUICK RELEASE MOUNTING PROVISIONS INSTALLED IN ACCORDANCE WITH DRAWING 70102 IS MANDATORY PREREQUISITE FOR THIS INSTALLATION.
2. HIGH SKID GEAR INSTALLATION IS MANDATORY PREREQUISITE FOR THIS INSTALLATION.
3. SEE FLIGHT MANUAL SUPPLEMENT, FMS701.90, FOR LIMITATIONS ON HELICOPTER OPERATIONS WITH CARGO BASKET INSTALLED.
4. SEE INSTRUCTIONS FOR CONTINUED AIRWORTHINESS, ICA698.90, FOR MAINTENANCE INFORMATION.
5. BEAMS (73030-01 AND 73031-01) ARE USED FOR INSTALLATION OF EQUIPMENT ON BOTH LEFT AND RIGHT SIDES. PROVISIONS FOR INSTALLING THE QUICK RELEASE CARGO BASKET (69810-01) ON THE RIGHT SIDE IS PROVIDED.

WEIGHT AND BALANCE

ITEM	DESCRIPTION	WEIGHT (LB)	LONGITUDINAL ARM (IN)	MOMENT (LB-IN)	LATERAL ARM (IN)	MOMENT (LB-IN)
01	CARGO BASKET INSTALLATION (CARGO BASKET AND MOUNTING PROVISIONS)	64.9	113.9	7390	30.3	1966
	CARGO	200 MAX	114.1	22820	38.5	7700

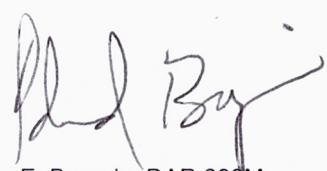
APPROVALS	DATE	AERO DESIGN LTD.		
DRAWN: JEFF CLARKE	17 APR 2006	CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 290M	2013 - 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7	
CHECKED: E. BURGOIN		tel: (403) 250-8027	fax: (403) 250-8333	aerodesign@telusplanet.net

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON: DECIMALS ANGLES X.XXX ± 0.010 ±1/2°	BELL 407 QUICK RELEASE CARGO BASKET INSTALLATION			
	NOT TO SCALE	DWG. SIZE	DWG. NO.	REV.
	SHEET 2 OF 2	A4	70101	3

DOCUMENT CONTROL LIST

DOCUMENT NO.	DOCUMENT CONTENT	REVISION
INSTALLATION DOCUMENTS		
70101	Quick Release Cargo Basket Installation	2
ICA698.90	Instructions for Continued Airworthiness	1
FMS701.90	Flight Manual Supplement	1
SI698.91	Service Instructions – Sliding Door Modification	0
FABRICATION DOCUMENTS		
DCL698-1	Document Control List for Quick Release Cargo Basket	1
DCL698-2	Document Control List for Beams	2
ENGINEERING DOCUMENTS		
APPROVAL		
 Transport Canada E. BURGOIN DAB 2000M <i>By [Signature]</i> APPROVED Appl'd No. 5600-48 Appl'd Date 08 DEC 2000 Issue No. 6 Issue Date 30 JAN 2008 REVISED 19 SEPT 2008	ORIGINAL DATE: 10 May, 2006 REVISION DATE: 23 September, 2008	AERO DESIGN LTD. 2013 – 39 th Ave NE, Calgary, Alberta, T2E 6R7 Ph. (403) 250-8027 Fax. (403) 250-8333
	SHEET 1 OF 1 Bell 407 Quick Release Cargo Basket Installation	
		Rev. 2
	DCL701	

FORM AE-100

DEPARTMENT OF TRANSPORT STATEMENT OF COMPLIANCE OF AIRCRAFT OR AIRCRAFT COMPONENTS WITH THE AIRWORTHINESS REQUIREMENTS			AE-100 No.: AE701 Initial Issue Date: 25 May, 2006 Revision: 2 Revision Date: 23 September, 2008 Approval No.: SH00-48 Delegation No.: 290M Delegate Name: E. Burgoin Classification of Designee: Employer: AERO Design Ltd.		
Aircraft Mfgr: Bell Aircraft Model: 407 Registration: All Eligible				Model Type Airplane <input type="checkbox"/> Helicopter <input checked="" type="checkbox"/> Appliance <input type="checkbox"/> Component <input type="checkbox"/>	
LIST OF APPROVED REPORTS AND DATA					
Document Number	Document Title			Compliance Status	
DCL701 SI698.91	Revision 2 Revision 0	Document Control List and all documents referred to therein Service Instructions - Sliding Door Modification			
DATA APPROVED BY TRANSPORT CANADA					
CERTIFICATION					
UNDER THE AUTHORITY VESTED IN ME BY THE DEPARTMENT OF TRANSPORT, I HEREBY CERTIFY THAT THE DATA LISTED ABOVE AND ON THE ATTACHED SHEETS NUMBERED Nil HAVE BEEN EXAMINED IN ACCORDANCE WITH ESTABLISHED PROCEDURES AND FOUND TO COMPLY, TO THE BEST OF MY KNOWLEDGE AND BELIEF WITH THE PERTINENT COMPLIANCE REQUIREMENTS.					
I THEREFORE <input type="checkbox"/> RECOMMEND FOR APPROVAL OF THESE DATA <input checked="" type="checkbox"/> APPROVE THESE DATA					
 E. Burgoin, DAR 290M					

DOCUMENT CONTROL LIST

DOCUMENT NO.	DOCUMENT CONTENT	REVISION
INSTALLATION DOCUMENTS		
70101	Quick Release Cargo Basket Installation	2
ICA698.90	Instructions for Continued Airworthiness	1
FMS701.90	Flight Manual Supplement	1
FABRICATION DOCUMENTS		
DCL698-1 DCL698-2	Document Control List for Quick Release Cargo Basket Document Control List for Beams	1 2
ENGINEERING DOCUMENTS		
APPROVAL	<p>ORIGINAL DATE: 10 May, 2006</p> <p>REVISION DATE: 28 September, 2007</p>	<p>AERO DESIGN LTD. 2013 – 39th Ave NE, Calgary, Alberta, T2E 6R7 Ph. (403) 250-8027 Fax. (403) 250-8333</p>
	SHEET 1 OF 1	<p>Bell 407 Quick Release Cargo Basket Installation</p>
		Rev.
	DCL701	1

AERO DESIGN LTD.

FMS701.90

BELL 407

ROTORCRAFT FLIGHT MANUAL SUPPLEMENT for the INSTALLATION of the AERO DESIGN QUICK RELEASE CARGO BASKET

Supplemental Type Certificate No. SH00-48

Sections I, II, III and IV of this document comprise the Transport Canada Approved sections of this Flight Manual Supplement. Compliance with Section I, Limitations, is mandatory.

Section V and any subsequent sections if present are Unapproved and are provided for information only.

The information and data contained in this Flight Manual Supplement supersede or supplement that contained in the basic Approved Flight Manual for the Bell 407 when fitted with the Quick Release Cargo Basket Installation. For limitations, procedures and performance not listed in this Flight Manual Supplement, refer to the Approved Flight Manual and other approved Flight Manual Supplements.



Revision 0
05 May, 2006

JUN 09 2006
Page 1
TRANSPORT CANADA APPROVED

Table of Contents

I	Limitations	3
II	Normal Procedures	3
III	Emergency Procedures	3
IV	Performance	3
V	Weight and Balance	4
VI	Installation / removal instructions	6

Record of Revisions

Revision	Issue Date	Pages Revised	Date Inserted	By
0	05 May, 2006	None		

I LIMITATIONS

1. The maximum load in the AERO Design Ltd. Quick Release Cargo Basket is 200 lb. (90.9 kg).
2. Flight operations limited to VFR conditions with AERO Design Ltd. Cargo Basket installed.
3. Maximum lateral or rearward speed limited to 25 KIAS.
4. Maximum winds from aft quadrants limited to 25 KIAS for takeoff, landing or hover flight.
5. V_{NE} is 140 KIAS except when the V_{NE} of the basic rotorcraft is more restrictive, in which case the lower V_{NE} applies.

II NORMAL PROCEDURES

1. Pre-flight inspections:

- a) Ensure that all cargo stored in the cargo basket does not extend outside the basket, is properly tied down and secured for flight.
- b) Ensure that the lid of cargo basket is closed and secured.
- c) Ensure the basket is locked in position on the beams. Pull up on the forward and aft end of the basket to check.

CAUTION

It is possible to exceed the lateral centre of gravity limits of the rotorcraft under some loading conditions. Pilots must ensure that lateral C of G is within limits when loading the basket.

III EMERGENCY PROCEDURES

No change from basic Approved Flight Manual.

CAUTION:

The rotorcraft glide angle is steeper than that of the basic helicopter when the AERO Design Ltd. Cargo Basket is installed.

IV PERFORMANCE

Climb performance may be reduced by up to 200 fpm.

Cruise speeds are reduced by approximately 10 kts. (11 mph).

V WEIGHT AND BALANCE

1. The following weight and balance is for the low mounted quick release cargo basket configuration, installed in accordance with drawing 70101.

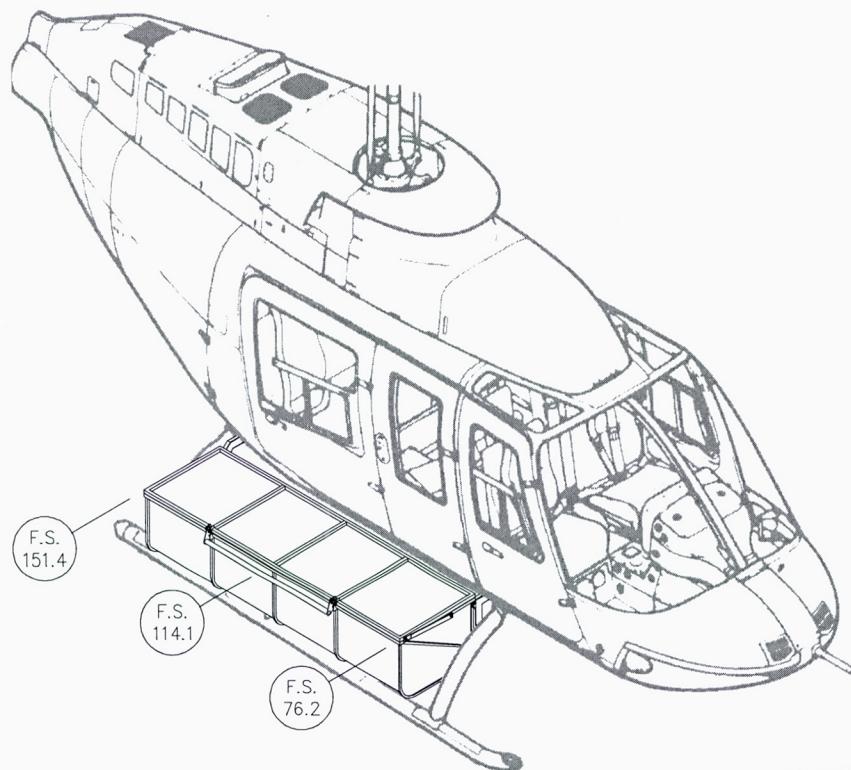


Figure 1 – Low Mounted Quick Release Cargo Basket Configuration

Low Mounted Quick Release Cargo Basket Configuration

Item	Weight	Longitudinal		Lateral	
		Arm	Moment	Arm	Moment
Cargo Basket Only ¹	45.0 lb	114.1 in	5134 in*lb	38.5 in	1733 in*lb
	20.4 kg	2898 mm	59 122 mm*kg	978 mm	19 949 mm*kg
Cargo ² (MAX)	200 lb	114.1 in	22 820 in*lb	38.5 in	7700 in*lb
	90.9 kg	2898 mm	263 467 mm*kg	978 mm	88 900 mm*kg

¹ Weight and balance is for Cargo Basket only. Mounting beams and attachment provisions are not included since they should have been included in the basic rotorcraft weight and balance at time of initial installation.

² Longitudinal and Lateral moment arms are given only for the center of the Cargo Basket. Due to the length of the basket, some loading arrangements may require that actual moment arms be measured, to determine the correct moments about the center of gravity.

CAUTION:

It is possible to exceed lateral CG limits in some configurations. For example, with one pilot, no passengers, fuel tanks half empty, and the AERO Design Ltd. cargo basket loaded with 200 pounds of cargo, the Lateral CG of the rotorcraft may be out of limits.

VI INSTALLATION / REMOVAL INSTRUCTIONS

The basket and beams are installed in accordance with drawing 70101. Removal of the basket leaving the beams in place is an approved configuration for flight. Logbook entry indicating installation or removal of basket and weight and balance amendment is required when basket is installed or removed.

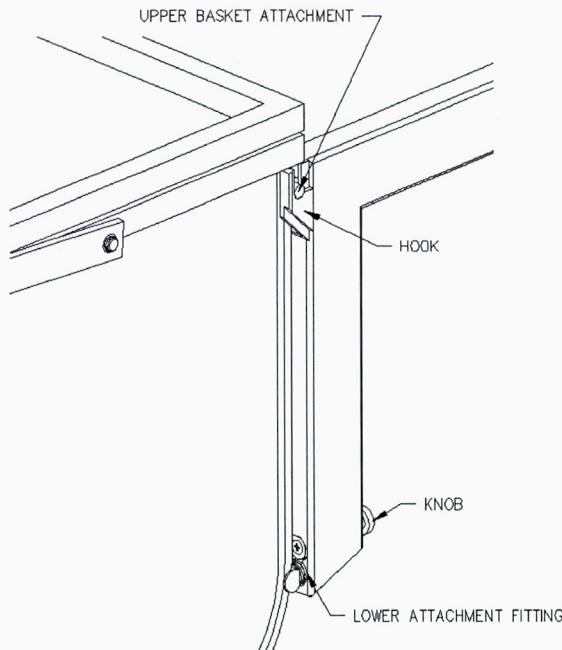


Figure 2 – Basket Attachment

1. Installation - Refer to Figure 2.
 1. Set basket upper attachment into hook on forward and aft beams.
 2. At forward end of basket, lift until lower attachment fitting can enter keyway. Push stop in and slide fitting down into keyway. Push down until locked. Repeat for aft end.
2. Removal - Refer to Figure 2.
 1. Pull knob at bottom end of forward beam and lift basket until lower attachment fitting is free of keyway. Keep upper basket attachment in hook on beam. Repeat for aft end.
 2. Lift basket off hooks and remove from helicopter.

1 November, 2007

Transport Canada
Aircraft Certification Division
11th Floor, Canada Place
9700 Jasper Avenue
Edmonton, Alberta
T5J 4E6

Attn: Jack Staal

Your File # : SH00-48
Our File # : Various

Re: Cargo Basket Approval Revisions

Jack,

Please find attached the following documents related to this project:

Supplemental Type Certificate (draft)

✓SH00-48 Issue 6

(High Quick Release Basket)

Document Control List
Document Control List
AE 100 Form
AE 100 Form
Compliance Program
Modification Approval Application Form
Engineering Report
Test Plan
Instructions for Continued Airworthiness
MSI 53 Review
Flight Manual Supplement (407)
Flight Manual Supplement (206L)
Cargo Basket Installation
Cargo Basket Assembly
Cargo Basket Body
Basket Components - End Hoop Assembly
Basket Comp. - Attach Hoop Assembly
Basket Components - Hoop
Basket Components - Placard
Support Beams
Handle Assembly
Handle Bar Assembly
Handle Bracket Assembly
Handle Lever
Basket Bracket
Lid Bracket
Bushing
Bushing

✓DCL766-1 Revision 0
✓DCL766-2 Revision 0
✓AE766-1 Revision 0
✓AE766-2 Revision 0
✓CP766 Revision 0
✓MOD766 Revision 0
✓ER766.01 Revision 0
✓TP766.02 Revision 0
✓ICA766.90 Revision 0
✓
✓FMS766.91 Revision 0
✓FMS766.92 Revision 0
✓76601 Revision 0
✓76610 Revision 0
✓76611 Revision 0
✓76621 Revision 0
✓76622 Revision 0
✓76623 Revision 0
✓76625 Revision 0
✓76630 Revision 0
✓36255 Revision 1
✓36261 Revision 3
✓36262 Revision 1
✓36271 Revision 1
✓36272 Revision 1
✓36273 Revision 1
✓36274 Revision 1
✓36275 Revision 2

(407 Attachment Provisions)

Document Control List

AE100 Form

Block Fabrication

✓ DCL700 Revision 1

✓ AE700 Revision 1

✓ 60620 Revision 1

(Low Fixed Basket)

Document Control List

Document Control List

AE100 Form

Cargo Basket Installation (206L)

Support Beams (Pocketed Aluminum)

Support Beams (Steel)

Engineering Report - Pocketed Beams

Instructions for Continued Airworthiness

Flight Manual Supplement

Document Control List

AE100 Form

Cargo Basket Installation (407)

Flight Manual Supplement

✓ DCL492 Revision 6

✓ DCL492-1 Revision 1

✓ AE492 Revision 2

✓ 49201 Revision 3

✓ 49221 Revision 3

✓ 49222 Revision 2

✓ ER492.04 Revision 1

✓ ICA492.90 Revision 1

✓ FMS492.01 Revision 2

✓ DCL606 Revision 3

✓ AE606 Revision 2

60601 Revision 2

✓ FMS606.01 Revision 2

(Quick Release Basket Installation)

Document Control List

AE100 Form

Cargo Basket Installation (407)

Flight Manual Supplement

Document Control List

AE100 Form

Cargo Basket Installation (206L)

Flight Manual Supplement

✓ DCL701 Revision 1

✓ AE701 Revision 1

✓ 70101 Revision 2

✓ FMS701.90 Revision 1

✓ DCL702 Revision 1

✓ AE702 Revision 1

✓ 70201 Revision 2

✓ FMS702.90 Revision 1

(Quick Release Basket Fabrication)

Document Control List

AE100 Form

Cargo Basket Assembly

Basket Body Assembly

Basket Components - End Hoop

Basket Components - Aft Hoop

Instructions for Continued Airworthiness

Document Control List

AE100 Form

Forward Beam Fabrication

Aft Beam Fabrication

Engineering Report

✓ DCL698-1 Revision 1

✓ AE698-1 Revision 1

✓ 69810 Revision 2

✓ 69811 Revision 2

✓ 69821 Revision 1

✓ 69822 Revision 0

✓ ICA698.90 Revision 1

✓ DCL698-2 Revision 2

✓ AE698-2 Revision 1

✓ 69830 Revision 2

✓ 69831 Revision 2

✓ ER698.04 Revision 0

AERO DESIGN LTD.
2013 - 39 Avenue N.E., Calgary, Alberta, T2E 6R7

Tel 403-250-8027
Fax 403-250-8333
info@aerodesign.ca

Please note the request for a revision to the FAA STC after the Canadian approval is issued.

Regards,



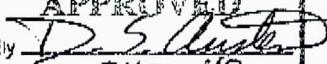
E. Burgoin, P.Eng, DAR 290M

Encl.

FORM AE-100

DEPARTMENT OF TRANSPORT STATEMENT OF COMPLIANCE OF AIRCRAFT OR AIRCRAFT COMPONENTS WITH THE AIRWORTHINESS REQUIREMENTS		AE-100 No.: AE701 Initial Issue Date: 25 May, 2006 Revision: 1 Revision Date: 1 November, 2007 Approval No.: SH00-48 Delegation No.: 290M Delegate Name: E. Burgoin Classification of Designee: Employer: AERO Design Ltd.		
Aircraft Mfgr: Bell Aircraft Model: 407 Registration: All Eligible				Model Type Airplane <input type="checkbox"/> Helicopter <input checked="" type="checkbox"/> Appliance <input type="checkbox"/> Component <input type="checkbox"/>
LIST OF APPROVED REPORTS AND DATA				
Document Number	Document Title		Compliance Status	
DCL701 70101 DCL698-1 DCL698-2	Revision 1 Revision 2	Document Control List and all documents referred to therein Quick Release Cargo Basket Installation Document Control List for Quick Release Cargo Basket Document Control List for Beams		
FMS701.90 ICA698.90	Revision 1 Revision 1	Flight Manual Supplement (only unapproved sections revised) Instructions for Continued Airworthiness		
DATA APPROVED BY TRANSPORT CANADA				
CERTIFICATION				
UNDER THE AUTHORITY VESTED IN ME BY THE DEPARTMENT OF TRANSPORT, I HEREBY CERTIFY THAT THE DATA LISTED ABOVE AND ON THE ATTACHED SHEETS NUMBERED Nil HAVE BEEN EXAMINED IN ACCORDANCE WITH ESTABLISHED PROCEDURES AND FOUND TO COMPLY, TO THE BEST OF MY KNOWLEDGE AND BELIEF WITH THE PERTINENT COMPLIANCE REQUIREMENTS.				
I THEREFORE <input type="checkbox"/> RECOMMEND FOR APPROVAL OF THESE DATA <input checked="" type="checkbox"/> APPROVE THESE DATA				
 E. Burgoin, DAR 290M				

DOCUMENT CONTROL LIST

DOCUMENT NO.	DOCUMENT CONTENT	REVISION
INSTALLATION DOCUMENTS		
70101	Quick Release Cargo Basket Installation	0
ICA698.90	Instructions for Continued Airworthiness	0
FMS701.90	Flight Manual Supplement	0
FABRICATION DOCUMENTS		
DCL698-1 DCL698-2	Document Control List for Quick Release Cargo Basket Document Control List for Beams	0 0
ENGINEERING DOCUMENTS		
APPROVAL:		
 Transport Canada Transport Canada	ORIGINAL DATE: 10 May, 2006	AERO DESIGN LTD. 2013 - 39 th Ave NE, Calgary, Alberta, T2E 6R7 Ph. (403) 250-8027 Fax. (403) 250-8333
AIRCRAFT CERTIFICATION DIVISION APPROVED  By <u>D. S. Austin</u> Appr'l No. <u>SH00-48</u> Appr'l Date <u>02-12-08</u> Issue No. <u>5</u> Issue Date <u>02-06-09</u> YY - MM - DD	REVISION DATE: SHEET 1 OF 1	Bell 407 Quick Release Cargo Basket Installation
		Rev.
	DCL701	0

AERO DESIGN LTD.

FMS701.90

BELL 407

ROTORCRAFT FLIGHT MANUAL SUPPLEMENT
 for the
INSTALLATION of the AERO DESIGN
QUICK RELEASE CARGO BASKET

Supplemental Type Certificate No. SH00-48

Sections I, II, III and IV of this document comprise the Transport Canada Approved sections of this Flight Manual Supplement. Compliance with Section I, Limitations, is mandatory.

Section V and any subsequent sections if present are Unapproved and are provided for information only.

The information and data contained in this Flight Manual Supplement supersede or supplement that contained in the basic Approved Flight Manual for the Bell 407 when fitted with the Quick Release Cargo Basket Installation. For limitations, procedures and performance not listed in this Flight Manual Supplement, refer to the Approved Flight Manual and other approved Flight Manual Supplements.



Revision 0
 05 May, 2006

JUN 09 2006 Page 1
 TRANSPORT CANADA APPROVED

AERO DESIGN LTD.

FMS701.90

Table of Contents

I	Limitations	3
II	Normal Procedures	3
III	Emergency Procedures	3
IV	Performance	3
V	Weight and Balance	4
VI	Installation / removal instructions	6

Record of Revisions

Revision 0
05 May, 2006

Page 2

AERO DESIGN LTD.

FMS701.90

I LIMITATIONS

1. The maximum load in the AERO Design Ltd. Quick Release Cargo Basket is 200 lb. (90.9 kg).
2. Flight operations limited to VFR conditions with AERO Design Ltd. Cargo Basket installed.
3. Maximum lateral or rearward speed limited to 25 KIAS.
4. Maximum winds from aft quadrants limited to 25 KIAS for takeoff, landing or hover flight.
5. V_{NE} is 140 KIAS except when the V_{NE} of the basic rotorcraft is more restrictive, in which case the lower V_{NE} applies.

II NORMAL PROCEDURES

1. Pre-flight inspections:

- a) Ensure that all cargo stored in the cargo basket does not extend outside the basket, is properly tied down and secured for flight.
- b) Ensure that the lid of cargo basket is closed and secured.
- c) Ensure the basket is locked in position on the beams. Pull up on the forward and aft end of the basket to check.

CAUTION

It is possible to exceed the lateral centre of gravity limits of the rotorcraft under some loading conditions. Pilots must ensure that lateral C of G is within limits when loading the basket.

III EMERGENCY PROCEDURES

No change from basic Approved Flight Manual.

CAUTION:

The rotorcraft glide angle is steeper than that of the basic helicopter when the AERO Design Ltd. Cargo Basket is installed.

IV PERFORMANCE

Climb performance may be reduced by up to 200 fpm.

Cruise speeds are reduced by approximately 10 kts. (11 mph).

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TRANSPORT CANADA APPROVED

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V WEIGHT AND BALANCE

1. The following weight and balance is for the low mounted quick release cargo basket configuration, installed in accordance with drawing 70101.

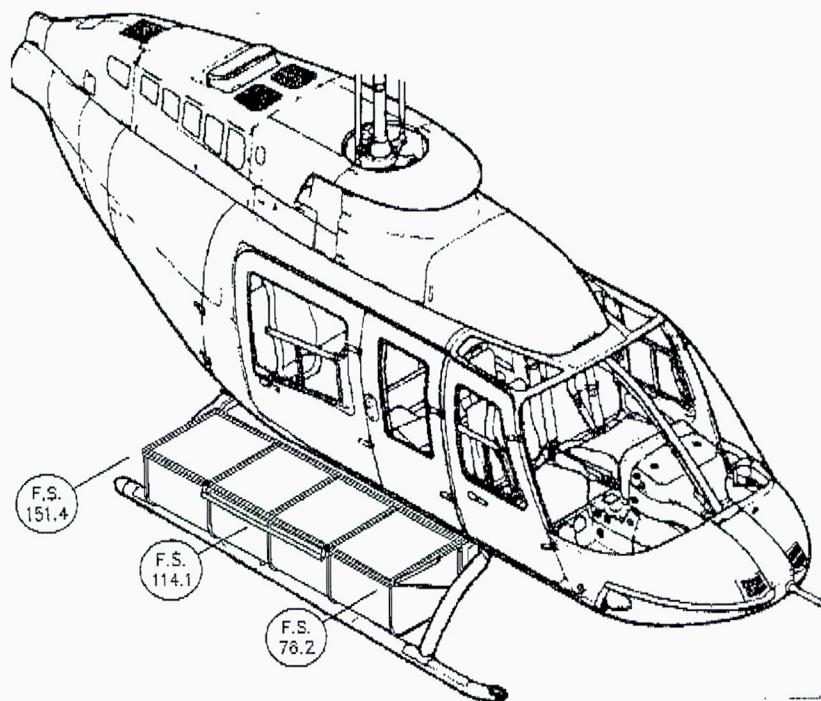


Figure 1 – Low Mounted Quick Release Cargo Basket Configuration

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Low Mounted Quick Release Cargo Basket Configuration

Item	Weight	Longitudinal		Lateral	
		Arm	Moment	Arm	Moment
Cargo Basket Only ¹	45.0 lb	114.1 in	5134 in*lb	38.5 in	1733 in*lb
	20.4 kg	2898 mm	59 122 mm*kg	978 mm	19 949 mm*kg
Cargo ² (MAX)	200 lb	114.1 in	22 820 in*lb	38.5 in	7700 in*lb
	90.9 kg	2898 mm	263 467 mm*kg	978 mm	88 900 mm*kg

¹ Weight and balance is for Cargo Basket only. Mounting beams and attachment provisions are not included since they should have been included in the basic rotorcraft weight and balance at time of initial installation.

² Longitudinal and Lateral moment arms are given only for the center of the Cargo Basket. Due to the length of the basket, some loading arrangements may require that actual moment arms be measured, to determine the correct moments about the center of gravity.

CAUTION:

It is possible to exceed lateral CG limits in some configurations. For example, with one pilot, no passengers, fuel tanks half empty, and the AERO Design Ltd. cargo basket loaded with 200 pounds of cargo, the Lateral CG of the rotorcraft may be out of limits.

VI INSTALLATION / REMOVAL INSTRUCTIONS

The basket and beams are installed in accordance with drawing 70101. Removal of the basket leaving the beams in place is an approved configuration for flight. Logbook entry indicating installation or removal of basket and weight and balance amendment is required when basket is installed or removed.

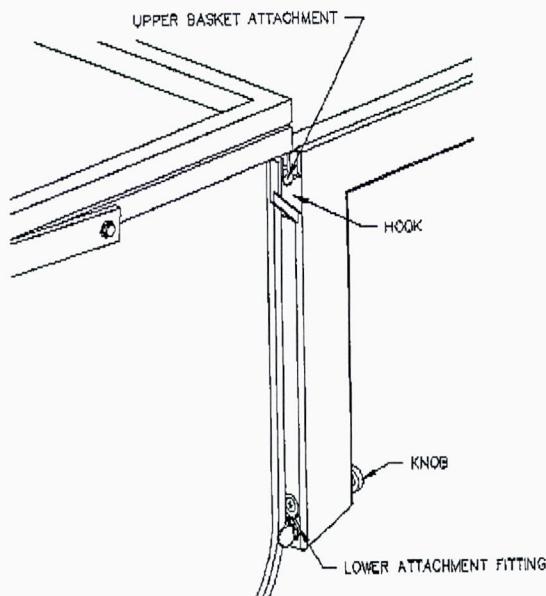


Figure 2 – Basket Attachment

1. Installation - Refer to Figure 2.
 1. Set basket upper attachment into hook on forward and aft beams.
 2. At forward end of basket, lift until lower attachment fitting can enter keyway. Push stop in and slide fitting down into keyway. Push down until locked. Repeat for aft end.
2. Removal - Refer to Figure 2.
 1. Pull knob at bottom end of forward beam and lift basket until lower attachment fitting is free of keyway. Keep upper basket attachment in hook on beam. Repeat for aft end.
 2. Lift basket off hooks and remove from helicopter.

FORM AE-100

DEPARTMENT OF TRANSPORT STATEMENT OF COMPLIANCE OF AIRCRAFT OR AIRCRAFT COMPONENTS WITH THE AIRWORTHINESS REQUIREMENTS		AE-100 No.: AE701 Initial Issue Date: 25 May, 2006 Revision: 0 Revision Date: Approval No.: SH00-48 Delegation No.: 290M Delegate Name: E. Burgoine Classification of Designee: Employer: AERO Design Ltd.													
LIST OF APPROVED REPORTS AND DATA <table border="1"> <thead> <tr> <th>Document Number</th> <th>Document Title</th> <th>Compliance Status</th> </tr> </thead> <tbody> <tr> <td>DCL701 70101 Revision 0</td> <td>Document Control List and all documents referred to therein Quick Release Cargo Basket Installation</td> <td></td> </tr> <tr> <td>DCL698-1 Revision 0</td> <td>Document Control List for Quick Release Cargo Basket</td> <td></td> </tr> <tr> <td>DCL698-2 Revision 0</td> <td>Document Control List for Beams</td> <td></td> </tr> </tbody> </table>				Document Number	Document Title	Compliance Status	DCL701 70101 Revision 0	Document Control List and all documents referred to therein Quick Release Cargo Basket Installation		DCL698-1 Revision 0	Document Control List for Quick Release Cargo Basket		DCL698-2 Revision 0	Document Control List for Beams	
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DATA APPROVED BY TRANSPORT CANADA <table border="1"> <tbody> <tr> <td>FMS701.90 ICA698.90</td> <td>Revision 0 Revision 0</td> <td>Flight Manual Supplement Instructions for Continued Airworthiness</td> <td></td> </tr> </tbody> </table>				FMS701.90 ICA698.90	Revision 0 Revision 0	Flight Manual Supplement Instructions for Continued Airworthiness									
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CERTIFICATION UNDER THE AUTHORITY VESTED IN ME BY THE DEPARTMENT OF TRANSPORT, I HEREBY CERTIFY THAT THE DATA LISTED ABOVE AND ON THE ATTACHED SHEETS NUMBERED <u>Nil</u> HAVE BEEN EXAMINED IN ACCORDANCE WITH ESTABLISHED PROCEDURES AND FOUND TO COMPLY, TO THE BEST OF MY KNOWLEDGE AND BELIEF WITH THE PERTINENT COMPLIANCE REQUIREMENTS.															
I THEREFORE <input type="checkbox"/> RECOMMEND FOR APPROVAL OF THESE DATA <input checked="" type="checkbox"/> APPROVE THESE DATA															
 E. Burgoine, DAR 290M															

DOCUMENT CONTROL LIST

DOCUMENT NO.	DOCUMENT CONTENT	REVISION
INSTALLATION DOCUMENTS		
70101	Quick Release Cargo Basket Installation	0
ICA698.90	Instructions for Continued Airworthiness	0
FMS701.90	Flight Manual Supplement	0
FABRICATION DOCUMENTS		
DCL698-1 DCL698-2	Document Control List for Quick Release Cargo Basket Document Control List for Beams	0 0
ENGINEERING DOCUMENTS		
APPROVAL:	ORIGINAL DATE: 10 May, 2006 REVISION DATE: SHEET 1 OF 1	AERO DESIGN LTD. 2013 – 39 th Ave NE, Calgary, Alberta, T2E 6R7 Ph. (403) 250-8027 Fax. (403) 250-8333 Bell 407 Quick Release Cargo Basket Installation
		Rev. 0
	DCL701	

AERO DESIGN LTD.

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BELL 407

ROTORCRAFT FLIGHT MANUAL SUPPLEMENT
for the
INSTALLATION of the AERO DESIGN
QUICK RELEASE CARGO BASKET

Supplemental Type Certificate No. SH00-48

Sections I, II, III and IV of this document comprise the Transport Canada Approved sections of this Flight Manual Supplement. Compliance with Section I, Limitations, is mandatory.

Section V and any subsequent sections if present are Unapproved and are provided for information only.

The information and data contained in this Flight Manual Supplement supersede or supplement that contained in the basic Approved Flight Manual for the Bell 407 when fitted with the Quick Release Cargo Basket Installation. For limitations, procedures and performance not listed in this Flight Manual Supplement, refer to the Approved Flight Manual and other approved Flight Manual Supplements.

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II	Normal Procedures	3
III	Emergency Procedures	3
IV	Performance	3
V	Weight and Balance	4
VI	Installation / removal instructions	6

Record of Revisions

Revision	Issue Date	Pages Revised	Date Inserted	By
0	05 May, 2006	None		

I LIMITATIONS

1. The maximum load in the AERO Design Ltd. Quick Release Cargo Basket is 200 lb. (90.9 kg).
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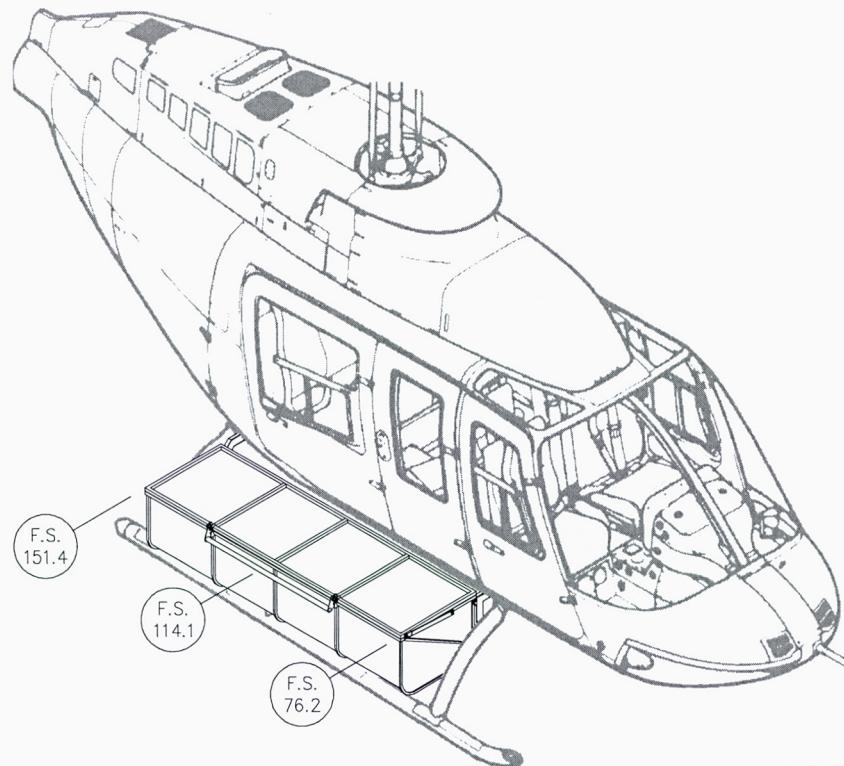


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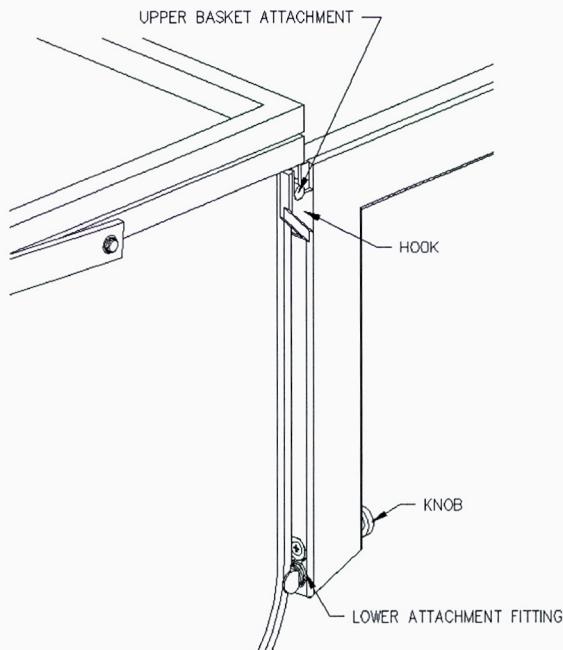


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